

April 30, 1997

VPCD-97-03(LDV/LDT/SV/ICI)

Dear Manufacturer:

**Subject: Carryover & Carry-Across of Alternative Durability Data**

This letter supplements the guidance provided in manufacturer guidance letter CD-94-13, Attachment I, paragraph 8, regarding the carryover and carry-across of certification durability data and in-use reality check data from 1994-98 model year Alternate Service Accumulation Durability Programs (ASADPs). Our policy regarding the carryover and carry-across of ASADP's is provided in 40CFR 86.094-24(f), Advisory Circular (A/C) 17F, and in this letter.

Manufacturers may, with prior EPA approval, carryover or carry-across previous ASADP data. Carryover and carry-across will be treated similarly. In general, the Agency will consider carryover of the deterioration factors (DFs) and the in-use reality check data separately, as follows:

**Carryover of Deterioration Factor Data**

Carryover of the DF data will be considered on a case-by case basis using criteria similar to the policies in A/C 17F, except that AMA catalyst temperature data will not be required. In cases where catalyst temperature data was previously required by A/C 17F to support the carryover request, EPA will instead require one of the following:

- For whole vehicle ASADPs or any road aging cycle (which are similar to the standard AMA durability program described in 40 CFR 86.094-13(c) except that a high speed mileage accumulation cycle is used) manufacturers should supply catalyst time-at-temperature data as described in CD-94-13, Attachment I, paragraph 5.2 and 5.3 on a vehicle in the new carryover configuration, while the vehicle is driven on the ASADP mileage accumulation cycle. Manufacturers should also supply a copy of the catalyst temperature profile of original durability data vehicle. Carryover of the DFs will normally be allowed if the catalyst temperature profile of the new carryover vehicle is less severe or equal to the catalyst temperature profile which was originally used to develop the DFs.

- For bench aging ASADPs (which typically involve testing a vehicle with artificially aged emission control components) the manufacturer will be expected to develop the bench aging time and temperature profile to age the emission control system components using the ASADP protocol. Carryover of the DFs will normally be allowed if the bench aging profile of the new vehicle is less severe or equal to the bench aging profile which was originally used to develop the DFs (provided the same analysis protocol was used to compare both profiles).

To compare the catalyst temperature profiles (of both whole vehicle and bench aging ASADPs) manufacturers should determine the effect of the carryover differences on thermal degradation of the catalyst(s) using good engineering judgement and provide EPA with the results of and the basis for that determination. In some cases, EPA may not use the manufacturer's criteria to evaluate catalyst thermal degradation. EPA will use the most appropriate criteria available at the time. Such criteria is expected to differ from the criteria contained in A/C 17F, Endnote #4.

#### **Carryover of In-Use Reality Check Data**

EPA will also consider carryover/carry-across of the reality check data on a case-by-case basis. Carryover of the reality check data will depend on the vehicle differences from one model year to the next, including differences in emission-related components and differences in the sales mix of vehicles within an engine family. In general, in-use testing requirements are as follows:

- No additional reality check vehicles would be required if the new model year vehicles are identical to or contain very minor differences in the emission-related components from the original reality check fleet.
- One or two new reality check vehicles per year would be required if a new (worst case) vehicle were added to the product line or if the sales mix changed substantially from the original reality check fleet.
- Two or three new reality check vehicles per year would be required if the new model year vehicles contain significant differences in the emission-related components from the original reality check fleet.
- Five new reality check vehicles per year would be required if the new model year vehicles contain major differences in the emission-related components (e.g. catalyst changes) from the original reality check fleet.

#### **Carryover of 1999 and Later Durability Data**

The current durability regulations contained in §86.094-13(e) expire at the end of the 1998 model year, however, the Agency recently published a direct final rule which extended the applicability beyond the 1998 model year, ref. 61 FR 58618, November 15, 1996. The Agency received adverse comments on this direct final rule and subsequently withdrew this direct final rule and proposed those regulations as a notice of proposed rulemaking; ref. 62 FR 11082 and 62 FR 11138, March 11, 1997. Carryover and carry-across requests for the 1999 model year engine families are contingent on the successful promulgation of these durability regulations.

Starting with the 2000 model year, the Agency is anticipating a broad revision to the durability requirements as part of a complete emission compliance assurance program revision, called CAP 2000. In this rulemaking, the Agency will propose significant revisions to the current reality check program. In addition, the Agency anticipates proposing a reduction of the testing conducted during certification balanced by a requirement that all manufacturers provide in-use verification data which the Agency can use to identify problems that occurred in the field. In light of the different purposes of the CAP 2000 in-use program from the current programs, the Agency does not anticipate allowing carryover of in-use data in the CAP 2000 program.

If you have any questions about this letter, please contact your certification team representative.

Sincerely,

Jane Armstrong, Director  
Vehicle Programs and Compliance Division  
Office of Mobile Sources

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